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NOV 14 1984

STATE OF UTAH

DEPARTMENT OF HEALTH

DIVISION OF ENVIRONMENTAL HEALTH

150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110-2500

RTP/ETC  
1114

Scott M. Matheson  
Governor

IPP



October 31, 1984  
533-6108

Kenneth Lee Alkema, Direct  
Room 474 801-533-612

James O. Mason, M.D., Dr.P.H.  
Executive Director  
801-533-6111

James H. Anthony  
Intermountain Power Project  
P. O. Box 111, Room 931  
Los Angeles, CA 90051

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Community Health Nursing  
Management Planning  
Medical Examiner  
State Health Laboratory

RE: Modified Approval Order to Add  
Control for Auxiliary Boilers,  
Millard County

Dear Mr. Anthony:

On September 17, 1984, the Executive Secretary published a notice of intent to approve air pollution controls for two oil fired 166 million BTU per hour auxiliary boilers for the power plant complex in Millard County. The 30 day public comment period has expired, and no comments were received.

This modified air quality approval order replaces the order dated October 17, 1983, and authorizes the plant to include two oil fired auxiliary boilers as proposed in your notice of intent dated March 27, 1984, with the following operating conditions:

1. The main boilers shall be constructed and operated according to the specifications in the contract document number 2010N, as submitted to the Executive Secretary on April 14, 1983.
2. The sulfur dioxide scrubbers for the main boilers shall be constructed and operated according to the specifications in the contract document number 9255.62.0202, as submitted on April 14, 1983.
3. The fabric filters for the main boilers shall be constructed and operated according to the specifications in the contract document number 9255.62.0203, as submitted on April 14, 1983.
4. No main boiler unit shall exceed  $8.352 \times 10^9$  BTU/hr heat input rate, as determined by ASTM Method D3176, D2015-77, or D3286-82 and the coal feed rate measured by the plant instrumentation. Records of heat input will be kept for two years and made available to the Executive Secretary upon request. Calibration of the plant coal feed rate meters shall be approved by the Executive Secretary. If coal other than bituminous is proposed for use, a notice of intent to modify shall be filed with the Executive Secretary in accordance with Section 3.1, UACR.

IPP

DIST	CC	AT
HA	✓	✓
IL	✓	✓
ILN	✓	✓
A	✓	✓
PE		
EJ		
CB		
PW		
SB	✓	✓
RS		
DB		
WF	✓	✓
LR		
NF		
BA		
AA	✓	✓
JW		
TU		
IC	✓	✓
EG		
CB		
FB		
AG		
GH		
HO		
EE		
	✓	✓
	✓	✓
	✓	✓
	✓	✓
	✓	✓
ILE	X	

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5. No main boiler unit shall discharge to the atmosphere:

- a. Particulate matter at a rate exceeding:
  - (1) 0.020 lb/10<sup>6</sup> BTU heat input
- b. Sulfur dioxide at a rate exceeding:
  - (1) 0.150 lbs/10<sup>6</sup> BTU heat input
  - (2) 10.0 percent of the potential combustion concentration
- c. Nitrogen oxides at a rate exceeding:
  - (1) 0.550 lbs/10<sup>6</sup> BTU heat input
- d. Visible emissions in excess of 20% opacity

6. The emission limitations in Paragraph 5 above shall be determined by the following procedures:

- a. Particulate matter: 40 CFR 60.48a (a (1-6))
- b. Sulfur dioxide: 40 CFR 60.48a (b (1+2)) (30 day average)
- c. Nitrogen oxides: (1) 40 CFR 60.48a (c) (30 day average)
- d. Opacity: 40 CFR 60, Appendix A, Method 9, and/or by six minute averages of the output of the continuous emission monitor required by 40 CFR 60.47 (a) and the Utah Air Conservation Regulations (UACR), Section 4.6.
- e. Performance testing shall be completed by the time frame required by 40 CFR 60.8 a. For the purpose of 40 CFR 60.8 a, maximum production rate shall be a boiler heat input of 7.517 X 10<sup>9</sup> BTU/hr and initial startup shall be the first day electricity is produced by the generator.

7. Emission of particulate matter from the following dust collectors shall not exceed a concentration of 0.024 gr/dscf and the following rates:

a. (1) railcar unloading (4 units)	15.3 lbs/hr each unit
(2) transfer building one	7.1 lbs/hr
(3) unit one 13A	6.9 lbs/hr
(4) transfer building two	5.5 lbs/hr
(5) transfer building four	3.7 lbs/hr
(6) crusher building one	3.8 lbs/hr
(7) unit one 13B	3.5 lbs/hr
(8) unit two 14A	4.1 lbs/hr
(9) unit two 14B	3.5 lbs/hr
(10) limestone preparation building	3.5 lbs/hr

b. Stack testing of the dust collectors listed in 7.a (1, 2, & 3) above shall be completed within 60 days of startup of each unit. Stack testing of collectors listed in 7.a (4 through 10) shall be as directed by the Executive Secretary. Ducting of gas flow from those dust collectors shall be designed to meet the requirements of 40 CFR 60, Appendix A, Method 1. 40 CFR 60 Methods 2 - 5 shall be used for testing.

8. Visible emissions from the following dust collectors shall not exceed 20% opacity as determined by 40 CFR 60, Appendix A, Method 9:

- a. coal truck unloading
- b. reserve reclaim
- c. limestone truck unloading hopper
- d. reclaim hopper
- e. crusher building
- f. each of the dust collectors listed in 7.a.1 through 10

9. Fugitive emissions from the following sources shall be minimized by using the control techniques herein and visible emissions from these sources shall not exceed 20% opacity, and shall be evaluated in accordance with Section 4.1.9, UACR:

- a. coal and limestone conveyor belts - enclosed on three sides
- b. coal and limestone dumpers - underground receiving
- c. coal stack out - telescopic spout and wet suppression
- d. coal and limestone reclaim - underground plow
- e. coal and limestone storage active pile - residual moisture
- f. coal and limestone reserve pile - compacting and crusting agent
- g. limestone stack out - telescopic spout
- h. flyash silo unloading - mix with scrubber sludge
- i. coal and limestone haul road - paved
- j. solid waste area access road -  $\text{CaCl}_2$  or other dust suppressant treatment
- k. solid waste haul road - watering
- l. solid waste/soil stockpile - watering
- m. solid waste burial pile - compaction and reseedling

Note: A fugitive dust control plan shall be submitted to the Executive Secretary for approval prior to startup of the specific operations and shall include as a minimum: control techniques proposed, quantity of suppressant (where applicable), and frequency of application (where applicable).

10. Reports required by 40 CFR 60.49a shall be submitted to the Executive Secretary within the time frame specified in (i) of that part.

11. A quality control program for the continuous monitoring system required by 40 CFR 60.47a and Section 4.6, UACR, must be developed and implemented. As a minimum, the quality control program must have written procedures for each of the following activities:

- a. installation of CEMs
- b. calibration of CEMs
- c. zero and calibration checks and adjustments for CEMs
- d. preventive maintenance for CEMS (including parts inventory)
- e. data recording and reporting
- f. program of corrective action for inoperable CEMS
- g. annual evaluation of CEM system

The quality control program must be described in detail, suitably documented, and approved by the Executive Secretary prior to the date of performance testing.

12. The auxiliary boilers shall be installed according to the specifications in the letter dated March 27, 1984.

13. No auxiliary boiler unit shall discharge to the atmosphere emissions in excess of any of the following rates or concentrations:

- a. Particulate -  $.10 \text{ lbs}/10^6 \text{ BTU}$   
20 lbs/hr
- b.  $\text{SO}_2$  -  $.60 \text{ lbs}/10^6 \text{ BTU}$   
100 lbs/hr
- c.  $\text{NO}_x$  -  $.35 \text{ lbs}/10^6 \text{ BTU}$   
58 lbs/hr

14. Compliance with the emissions limitations of Paragraph 13 shall be determined with the following test methods:

- a. Particulate - 40 CFR 60, Appendix A, Methods 1-5.
- b.  $\text{SO}_2$  - 40 CFR 60, Appendix A, Methods 1-4 and 6 or 8
- c.  $\text{NO}_x$  - 40 CFR 60, Appendix A, Methods 1-4 and 7

15. Stack testing for demonstration of compliance with the particulate standard of Paragraph 13 shall be performed within 60 days of initial start-up of the auxiliary boilers. Stack testing for  $\text{SO}_2$  and  $\text{NO}_x$  shall be performed if directed by the Executive Secretary.

16. Visible emissions from the auxiliary boilers shall not exceed 20% opacity as determined by 40 CFR 60, Appendix A, Method 9.

17. Sulfur content of the fuel combusted in the auxiliary boilers shall not exceed .58% by weight as determined by ASTM method D129. Each delivery of fuel shall be tested. Records of the test results shall be maintained and shall be made available to the Executive Secretary upon request for two years. A summary of each quarter's test results shall be submitted with the quarterly CEM report. The summary shall contain the average sulfur content expressed as percent weight for the quarter.

18. Combined annual fuel oil consumption of the two auxiliary boilers shall not exceed the following:

1st year of operation from July 1, 1985 to June 31, 1986 - 250,000 barrels (equivalent to 50% capacity factor)

2nd year of operation from July 1, 1986 to June 31, 1987 - 150,000 barrels (equivalent to 30% capacity factor)

All subsequent years - 50,000 barrels (equivalent to 10% capacity factor)

19. Malfunctions of process or air pollution control equipment shall be reported and handled in accordance with Section 4.7, UACR, and 40 CFR 60.46a.

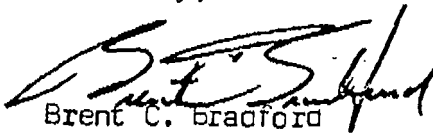
20. Post construction monitoring of ambient air for at least one year after startup is required. A monitoring and quality assurance plan for post construction monitoring must be submitted for approval by the Executive Secretary no later than six months before initial startup of either boiler.

21. All installations and facilities authorized by this approval order shall be maintained and operated in proper condition.

22. The Executive Secretary shall be notified upon startup/normal operations as an initial compliance inspection is required.

The fee for issuing this approval order is \$792.03. The amount (see enclosures for breakdown of costs) is payable to the Utah Department of Health, sent to the Executive Secretary, Utah Air Conservation Committee, and is due within 30 days after receipt of the approval order.

Sincerely,



Brent C. Bradford  
Executive Secretary  
Utah Air Conservation Committee

MRK/ads

cc: EPA Region VIII (N. Huey)

Central Utah District Health Department

enclosures (2)

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